207.3 Depth Profiling (wafer form)

SRMs 2133, 2134 and 2137 are for calibrating the secondary ion response to minor and trace element levels in a silicon matrix. SRM 2133 is certified for phosphorus;SRM 2134 is certified for arsenic; SRM 2137 is certified for boron. SRM 2135c is for calibrating equipment used to measure sputtered depth and erosion rates in surface analysis. SRM 2135c is certified for total chromium and total nickel thickness, for individual layer uniformity, for nickel/chromium bilayer uniformity, and for individual layer thickness.

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	Description	Value	Unit/Size (cm)
2133	Phosphorus Implant in Silicon Depth Profile Standard	^{31}P: 0.04927 µg/cm^2 (9.58×10^{14} atoms/cm$^{2)}$	1 cm x 1 cm crystal
2134	Arsenic Implant in Silicon Profile Standard	^{75}As: 0.09120 µg/cm^2 (7.330×10^{14} atoms/cm$^{2)}$	1 cm x 1 cm crystal
2135c	Nickel-Chromium Thin-Film Depth Profile Standard	Cr: 41.3 µg/cm^2 Ni: 49.4 µg/cm^2	1 x 2.54 x 0.04
2137	Boron Implant in Silicon Depth Profile Standard	^{10}B: 0.01692 µg/cm^2 (1.018×10^{15} atoms/cm$^{2)}$	1×1